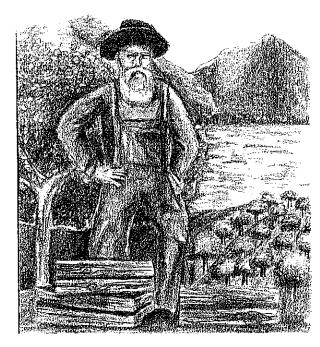
health care, education, and resources to assist the tribes But promises were not kept and more lands were taken

The Flathead Reservation to the south of here is a remnant of the aboriginal lands once inhabited by the tribes. Despite this and other adversities the tribal government has worked in partnership with federal, state, and county governments to establish progressive policies that reaffirm their traditional inter-connection between cultural and natural resources. Included in their accomplishments are the first tribally-designated wilderness in the United States, Class I air quality standards, and their own water quality, fisheries and wildlife management programs which are controlled by tribally enacted and enforced environmental protection laws.

# 5 Dancing Bears, Cherries, and Steamboats



There are several stories telling how this area came to be named Bear Dance. One story tells of a bear attacked by bees while trying to get honey. Another tells of trappers killing a bear and taking the meat to Harry Chapman's ranch for a feast and dance with neighbors. How the Bear Dance name came about is a mystery, but it is certain that Harry Chapman once lived here.

Harry Chapman was the first man to grow cherries on the east shore of Flathead Lake. Chapman moved to the area in 1893. In 1906 he settled his 160 acre ranch just north of the Flathead Indian Reservation.

Steamboats were the only source of transportation on Flathead Lake during the late 1800s and early 1900s. Harry Chapman, other cherry growers and loggers depended on steamboats to transport their goods across Flathead Lake to Polson. Imagine what it would be like to watch a steam boat chugging across the lake stacked high with cherry crates and towing a float of logs.

### 6 Oh Deer!

As you wandered through this area, have you noticed the small brown pellets that are about 1/2 to 1 inch in size? These are deer "droppings" and are a sign that white-tailed deer ( *Odocoileus virginianus*) have been in the area. Deer are common in the Flathead-Valley. They use forested areas for cover and security and more open areas for browse.



Typical Deer Droppings (actual size)

When deer habitat is bisected by a highway, such as Highway 35 just to the east of here, dangerous conditions exist for deer and motorists. Since 2002 State Farm has reported a 32% increase in the amount of deer-vehicle collisions in Montana. They predict that there is a 1 in 112 chance that you will hit a deer in the next 12 months. But there is more involved in these collisions. Deer carcasses attract other animals to the roadway, like bear and bald eagles, and these can pose additional risks for motorists and wildlife.

Please return this brochure to the box at the trailhead if you don't want to keep it.



REUSABLE

This brochure was prepared by Bigfork High School students during the 2008/2009 school year

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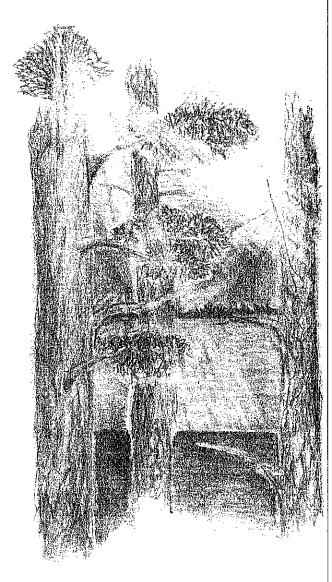
Art work by Lena Olson.

# For additional information contact:

Swan Lake Ranger District Flathead National Forest 200 Ranger Station Road Bigfork, MT 59911 (408) 837-7500



# Flathead Lake Interpretive Trail

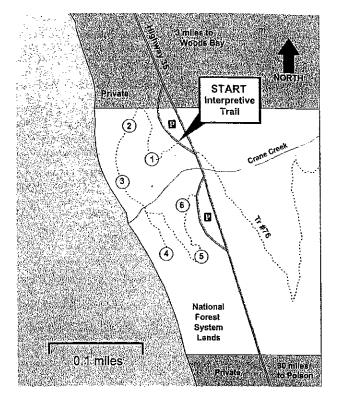


United States Department of Agriculture

Flathead National Forest

#### Flathead Lake Interpretive Trail

The trail station numbers correspond to those on signs along the trail, but there is more to see than what is written about. The trail is a 1/2 mile long loop. Parts are steep, but there are benches where you can rest and enjoy the scenery.



# 1 Burning Time

The triangle shaped alcove at the base of this tree is called a Cat Face. It was caused by fires burning around the tree, but not killing it. Between the years 1668 and 1883 wildfires burned through this area about every 14 years. We know this because a sample from this tree shows all the fire scars of its lifetime. The tree has been alive since the early 1600's, which is about the time Jamestown, Virginia was settled and William Shakespeare died. The last wildfire burned through this area in 1883 and created the Cat Face.

Fire suppression started in this area in the early 1900's which is why there were no wildfires since 1883. Without frequent wildfires, undergrowth became too thick,

shaded out young trees, and stole water from older trees. Consider the Ponderosa Pine, it is a fire adapted species which has the ability to survive fires and take advantage of favorable conditions for seeds following fires. Because of the lack of frequent fires in this area, the Ponderosa Pine was almost eliminated from this site.

The U.S. Forest Service is working to restore natural conditions here by thinning vegetation, burning, and planting Ponderosa Pine saplings. This work also sought to protect neighboring private land from wildfire and leave more vegetation along the lakeshore and creeks for fisheries.



Cat Face

## ② Dwarf Mistletoe and Insects

Look at some of the trees in this area. You might see some round, dense clumps of branches that have been deformed by mistletoe (Phoradendron serotinum). Mistletoe has small groups of smooth-edged, oval evergreen leaves with white berries. In the spring the berries shoot out seeds at speeds of up to 50 miles per hour. If the seeds land on the branches of a neighboring tree it will send out roots that will grow into the living part of the tree. Mistletoe is a parasitic plant that will eventually kill the tree. While dwarf mistletoe has traditionally been viewed as a forest pest, recent studies have shown that mistletoes have been a part of forest ecosystems for thousands, possibly millions of years and provide important habitat for many birds and small mammals.

Try to find a stump around you somewhere. Do you see small tunnels appearing in the wood? These were caused by the Flatheaded Woodborer (*Coleoptera: Buprestidae*) which only eats dead wood. You will also see a powdered wood-like substance in the tunnels. This is beetle feces, also known as "frass".

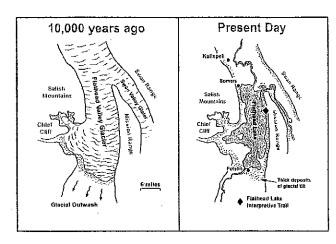
Another wood eating beetle is the Douglas-Fir Beetle (Dendroctonus psudotsugae). This beetle eats the living part of the tree, called the cambium, which is just beneath the bark.

trees can also be seen as pests. In the larger picture, however, they do have a role to play in the forest ecosystem. Dead standing trees provide homes or habitat for many birds and mammals, like woodpeckers, owls, and squirrels. Large dead trees can provide dens for marten and even black bears. When the dead trees fall over and decay, they provide important nutrients to the soil so a strong healthy forest of trees can continue to grow.

# (3) Rock and Ice

Insects that damage or kill

Imagine yourself looking out into a white, bleak place. Here you would see no trees, no water, and very little life; nothing but ice and sky. During the last Ice Age, about 10,000 years ago, the area that is now occupied by the vast lake in front of you was covered by a thick sheet of ice. This stagnant sheet of ice did not melt as fast as its surrounding glaciers and reached to the top of the mountains across the valley. Glaciers sculpted the landscape that we know today as the Flathead Valley.

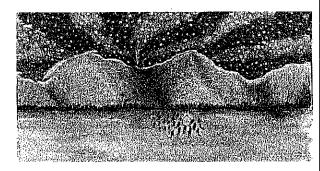


The glacier that formed the Flathead Valley was thousands of feet deep and up to 20 miles wide. On rock outcrops on the other side of the lake are markings that were carved by the gradual movement of the glacier. Through the course of time, the glacier deposited large amounts of sand and gravel as it traveled. Some of this

sediment, called till, sits beneath the cities of Polson, Somers, and Bigfork. As the glacier moved it carved a large bowl while pushing the sediment forward. The accumulation of till in front of the glacier created a dam that was partly breached when the rivers resumed their flow after the glacier melted. Water then filled the bowl and the area behind the dam creating this vast lake.

## 4 The First People

Salish elders tell of a time long before European settlers came to Montana, when the Lake would freeze over and the people would cross on foot from Big Arm to points along the west shore like Bigfork Bay. Here they would stake a camp, wait 'till nightfall, then make a big fire on the ice. This would attract fish, which they would catch with baited bone hooks on sinew line though holes they cut in the ice with stone axes. Imagine if you could have stood here then and looked on as a band of Salish crossed the lake on their way to a night of fishing in the firelight.



The Bitterroot Salish, Pend d'Oreille, and Kootenai tribes were the first people to inhabit this area. For many thousands of years they sustained a lifestyle of hunting, fishing, plant harvest, and trade over a large territory that included the land east of the Rockies, north into what is now Canada, south into Wyoming, and west into Washington and Idaho. In the late 1700's waves of small pox and other epidemics introduced by European contact decimated the populations of the tribes. In 1855 the Hellgate Treaty was negotiated between the remaining members of the tribes and the United States of America. The chiefs ceded millions of acres of aboriginal territory, but retained the Bitterroot and Flathead Valleys in exchange for federal government's promise of peace,

(continued on the back)